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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,285	03/12/2004	David W. Farchmin	11003.00026.03AB047	1291
7590 Susan M. Donahue Rockwell Automation Inc. 704-P 1201 South Second Street Milwaukee, WI 53204-2496			EXAMINER GOODCHILD, WILLIAM J	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/800,285

Applicant(s)

FARCHMIN ET AL.

Examiner

WILLIAM J. GOODCHILD

Art Unit

2445

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-97 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-97 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date See Continuation Sheet
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :03/12/2004, 04/02/2004, 12/20/2004, 03/08/2005, 05/02/2005, 09/08/2005, 11/21/2005, 02/06/2006, 03/23/2006, 07/31/2006, 02/22/2007.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Figure 8, referees to item 270, the specification, page 29, referees to an item 720 which is not on the drawing, and does not referee to item 270.

Appropriate correction is required.

Information Disclosure Statement

2. The information disclosure statements filed December 2, 2004, May 2, 2005, February 6, 2006 and July 31, 2006 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

3. The term "improbable" in claims 54 and 63 is a relative term which renders the claim indefinite. The term "improbable" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary

skill in the art would not be reasonably apprised of the scope of the invention. It is unclear within the claims when a relationship between two resources is 'improbable'.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-15, 20, 23-25, 28-35, 37, 41-48, 50-52, 68-83, 85-91, 93-94 and 96-97 are rejected under 35 U.S.C. 102(b) as being anticipated by Dolin, Jr., (US Patent No. 5,519,878).

Regarding claims 1 and 74, Dolin discloses identifying at least a first reference point within the space [Dolin, column 4, lines 21-24];

identifying the relative juxtaposition of at least a first resource with respect to the first reference point [Dolin, column 4, lines 26-41]; and

associating the first resource with the program as a function of the relative juxtaposition of the resource to the reference point [Dolin, column 4, lines 28-41 and column 9, lines 44-59].

Regarding claims 2 and 75, Dolin further discloses reference tags, each unique tag referencing a separate resource as one of a program input and a program output [Dolin, column 4, lines 22-41], the step of associating including using the relative juxtaposition of the first resource to identify a first of the reference tags to which the first resource is to be associated and associating the first tag with the first resource [Dolin, column 4, lines 22-41].

Regarding claims 3 and 76, Dolin further discloses wherein the plurality of resources are linked via a communication network, the method further including the step of assigning a logical network address to each of the resources and wherein the step of associating includes identifying the network address of the first resource and correlating the network address of the first resource with the first tag [Dolin, column 9, lines 46-50].

Regarding claims 4 and 77, Dolin further discloses wherein each resource includes a unique MAC number and wherein the step of assigning a network address to each resource includes, when a resource is linked to the network, obtaining the MAC number from the resource, associating an unused network address with the MAC number, transmitting the network address to the resource and storing the address at the resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claims 5 and 78, Dolin further discloses replacing each instance of the first tag in the program with the address of the first resource [Dolin, column 4, lines 22-41

and column 7, lines 32-65].

Regarding claims 6 and 79, Dolin further discloses identifying the relative juxtaposition of the resource with respect to at least one of the reference point and one of the other resources [Dolin, column 4, lines 22-41]; and associating the resource with the program as a function of the relative juxtaposition of the resource to the at least one of the reference point and one of the other resources [Dolin, column 4, lines 22-41].

Regarding claim 7, Dolin further discloses wherein the program includes reference tags, each unique tag referencing a separate resource as one of a program input and a program output, the step of associating including, for each resource, using the relative juxtaposition of the resource to identify a reference tags to which the resource is to be associated and associating the tag with the resource [Dolin, column 4, lines 22-41].

Regarding claim 8, Dolin further discloses identifying the network address of the resource and correlating the network address of the resource with the identified tag [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 9, Dolin further discloses replacing each instance of the tag in the program with the address of the associated resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 10, Dolin further discloses the step of forming a database that correlates tags and associated network addresses [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claims 11 and 80, Dolin further discloses wherein the step of identifying the relative juxtaposition includes identifying the locations of at least a sub-set of the plurality of resources and using the location information to determine the relative juxtaposition [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 12, Dolin further discloses wherein the step of identifying the locations includes providing an automatic location determining system and using the automatic system to determine the locations of at least a sub-set of the resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 13, Dolin further discloses wherein the automatic system determines the locations of only a first sub-set of the resources and wherein the step of identifying locations further includes the steps of, for resources in addition to the resources in the first sub-set, identifying locations of the resources manually [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 14, Dolin further discloses wherein the program includes reference

tags, each unique tag referencing a separate resource as one of a program input and a program output, the method further including the steps of, for each of the resources, determining the relative juxtapositions of the resources and associating each resource with a separate one of the tags [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 15, Dolin further discloses the steps of providing an interface and, after the step of automatically determining the locations of the first sub-set of resources, indicating the resources for which locations have to be determined manually via the interface [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 20, Dolin further discloses wherein the step of identifying locations includes manually measuring the locations of each of at least a sub-set of the resources with respect to at least one of the reference point and at least another of the resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 23, Dolin further discloses wherein each of the tags is useable to identify a separate tag specified position and wherein the step of using the relative juxtaposition of the first resource to identify a first of the reference tags includes, for each of at least a sub-set of the tags, identifying the separate tag specified position, comparing the relative juxtaposition information to the tag specified position and, when the relative juxtaposition indicates the tag specified position, identifying the tag associated with the tag specified position [Dolin, column 4, lines 22-41 and column 7,

lines 32-65].

Regarding claim 24, Dolin further discloses wherein each of the tags indicates the tag specified position associated with the tag [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 25, Dolin further discloses the step of providing an additional information tool that, in conjunction with the tags, is usable to identify the tag specified positions for each of the tags and wherein the step of using the relative juxtaposition further includes the step of using the additional information tool to identify the tag specified position of at least a sub-set of the tags prior to comparing [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 28, Dolin further discloses wherein the resources are linked via a network, the method further including the step of, prior to associating, assigning a logical network address to each of the reference tags, the step of associating including the steps of identifying the network address of the first tag and assigning the identified address to the first resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 29, Dolin further discloses wherein the step of assigning the identified address includes storing the identified address at the first resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 30, Dolin further discloses wherein the step of assigning a network address to each reference tag includes identifying each tag in the program, identifying an unused network address and correlating the unused address with the tag [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 31, Dolin further discloses the steps of, for each of at least a sub-set of the resources in addition to the first resource, identifying the relative juxtaposition of the resource with respect to at least one of the reference point and one of the other resources, using the relative juxtaposition of the resource to identify a reference tag to which the resource is to be associated and associating the identified tag with the resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 32, Dolin further discloses associating includes identifying the network address of the tag and assigning the identified address to the associated resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 33, Dolin further discloses the step of, after identifying the at least a first reference point, determining the location of the first reference point within the space [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 34, Dolin further discloses wherein the at least a first reference point is

at the location of at least a second resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 35, Dolin further discloses wherein the step of identifying the relative juxtaposition between the first and second resources includes determining the location of the second resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 37, Dolin further discloses the step of performing the identifying and associating steps again for at least a sub-set of the resources [Dolin, column 4, lines 11-14].

Regarding claim 41, Dolin further discloses wherein at least a sub-set of the resources include actuators and sensors [Dolin, column 5, lines 56-61].

Regarding claims 42 and 86, Dolin discloses identifying at least a first reference point within the space [Dolin, column 4, lines 21-24];
identifying the relative juxtaposition of the at least a first resource with respect to the at least a first reference point [Dolin, column 4, lines 26-41]; and
assigning a first network address to the at least a first resource as a function of the relative juxtaposition of the at least a first resource to the reference point [Dolin, column 7, lines 32-67].

Regarding claims 43 and 87, Dolin further discloses the step of providing tags and associated network addresses, each tag useable to identify a separate tag specified position and wherein the step of assigning includes, for each of at least a sub-set of the tags, identifying the separate tag specified position, comparing the relative juxtaposition information to the tag specified position and, when the relative juxtaposition indicates the tag specified position, assigning the address associated with the tag to the at least a first resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 44, Dolin further discloses wherein the step of providing tags and associated network addresses includes providing at least a first program to be run by at least a first processor to control the resources wherein the program includes at least the first tag and, for each of the tags in the program, assigning an unused network address to the tag [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claims 45 and 88, Dolin further discloses the step of identifying the relative juxtaposition includes identifying the relative juxtapositions of each of the plurality of resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claims 46 and 89, Dolin further discloses wherein the step of assigning includes assigning a separate network address to each of the resources as a function of the relative juxtapositions of the resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 47, Dolin further discloses wherein the step of identifying the relative juxtapositions includes identifying the locations of the resources and using the location information to determine the relative juxtapositions [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 48, Dolin further discloses wherein the reference point is the location of at least one of the resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claims 50 and 90, Dolin discloses identifying the relative juxtapositions of the resources within the space; identifying the tag specified positions within the space [Dolin, column 4, lines 21-41];
comparing the relative juxtapositions of the resources and the tag specified positions [Dolin, column 4, lines 24-31]; and
when a relative juxtaposition for a resource indicates a tag specified position associated with a tag, associating the address of the resource and the tag [Dolin, column 4, lines 24-41].

Regarding claim 51, Dolin further discloses wherein each tag includes the tag specified position [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claims 52 and 91, Dolin further discloses providing an additional information

tool that, in conjunction with the tags, is usable to identify the tag specified positions for each of the tags and wherein the step of identifying the tag specified positions further includes the step of using the additional information tool to identify the tag specified positions [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claims 68 and 93, Dolin further discloses associating a space within the environment with the process [Dolin, column 4, lines 21-41];
providing at least a first information device [Dolin, column 4, lines 21-41];
determining the location of the information device within the environment [Dolin, column 4, lines 21-41]; and
when the information device is proximate at least a sub-space within the space, identifying the resources to be positioned within the sub-space, identifying the tags associated with the resources and indicating the tags associated with the resources [Dolin, column 4, lines 21-41].

Regarding claims 69 and 94, Dolin further discloses identifying the resource to the network and indicating one of the tags via the information device that is to be associated with the resource and, wherein, the method further includes the step of associating the identified resource with the indicated tag [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 70, Dolin further discloses wherein the step of identifying the resource

includes linking the resource to the network [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 71, Dolin further discloses wherein the information device includes a display and wherein the step of identifying the tags includes providing a list of the tags and the step of indicating one of the tags includes selecting one of the tags from the list [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claims 72 and 96, Dolin further discloses wherein each of the resources is associated with a network address and wherein the processor associates by determining the resource address and correlating the resource address with the tag [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claims 73 and 97, Dolin further discloses wherein the processor performs the steps for each resource to be located within the sub-space [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 81, Dolin further discloses wherein each of the tags is useable to identify a separate tag specified position and wherein the processor uses the relative juxtaposition of the first resource to identify a first of the reference tags by, for each of at least a sub-set of the tags, identifying the separate tag specified position, comparing the relative juxtaposition information to the tag specified position and, when the relative

juxtaposition indicates the tag specified position, identifying the tag associated with the tag specified position [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 82, Dolin further discloses wherein the resources are linked via a network, the processor also programmed to, prior to associating, assign a logical network address to each of the reference tags, the processor associating by identifying the network address of the first tag and assigning the identified address to the first resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 83, Dolin further discloses wherein the processor assigns a network address to each reference tag by identifying each tag in the program, identifying an unused network address and correlating the unused address with the tag [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 85, Dolin further discloses wherein at least a sub-set of the resources includes actuators and sensors [Dolin, column 5, lines 56-61].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 16-19, 21-22, 38, 49 and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolin as applied to claim 11 above, and further in view of Aljadeff et al., (US Publication No. 2004/0203870), (hereinafter Aljadeff).

Regarding claim 16, Dolin does not specifically disclose providing a separate wireless device for each of at least a sub-set of the resources and at least one sensor within the space, transmitting signals from at least one of the wireless devices and the sensor to the other of the wireless devices and the sensor and using the signals received by the other of the wireless devices and sensor to determine resource locations.

However Aljadeff discloses separate wireless devices for resources, transmitters and receivers to determine resource locations [Aljadeff, paragraphs 8 and 11].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include wireless devices sensing other devices locations in order to automatically discover the location of a resource.

Regarding claim 17, Dolin-Aljadeff further discloses providing a separate transmitter for each of the at least a sub-set of the resources and the step of transmitting includes transmitting signals from the transmitters to the at least one sensor [Aljadeff, paragraphs 8 and 11].

Regarding claim 18, Dolin-Aljadeff further discloses providing transmitters associated with each of the resources [Aljadeff, paragraphs 8 and 11].

Regarding claim 19, Dolin-Aljadeff further discloses wherein the step of identifying locations also includes, for at least a subset of the plurality of resources, manually measuring the locations of each of at least a sub-set of the resources with respect to at least one of the reference point and at least another of the resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 21, Dolin-Aljadeff further discloses providing a wireless information device (WID) and at least one sensor within the space and, for each of at least a sub-set of the resources, positioning the WID proximate the resource, transmitting signals from at least one of the WID and the sensor to the other of the WID and the sensor, using the signals received by the other of the WID and the sensor to determine WID location and identifying the WID location as the resource location [Aljadeff, paragraphs 8 and 11].

Regarding claim 22, Dolin-Aljadeff further discloses identifying the relative juxtaposition of the resource with respect to at least one of the reference point and one of the other resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65];

using the relative juxtaposition of the resource to identify a reference tag to which the resource is to be associated [Dolin, column 4, lines 22-41 and column 7, lines 32-65];

and

associating the identified tag with the resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 38, Dolin-Aljadeff further discloses identifying the relative juxtaposition includes providing a wireless location determining system for determining resource location and using the system to determine the relative juxtaposition [Aljadeff, paragraphs 8 and 11].

Regarding claim 49, Dolin-Aljadeff further discloses providing a wireless locating system within the space including at least a first sensor [Aljadeff, paragraphs 8 and 11]; using the locating system to identify the locations of at least a first sub-set of the resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65]; manually determining the locations of at least a second sub-set of the resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65]; using the resource locations to identifying the relative juxtapositions of at least a sub-set of the resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65]; and assigning network addresses to at least a sub-set of the resources as a function of the relative juxtapositions of at least a sub-set of the resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 95, Dolin-Aljadeff further discloses wherein the information device is a wireless information device and the system further includes at least one access point linked to the processor [Aljadeff, paragraphs 8 and 11].

8. Claims 26-27, 53 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolin as applied to claim 25 above, and further in view of Dunstan, (US Patent No. 6,789,136).

Regarding claim 26, Dolin does not specifically disclose wherein the additional information tool is at least one of a mechanical and an electrical specification. However, Dunstan discloses an electrical specification [Dunstan, figure 4 and column 1, lines 53-33 and column 4, line 60 – column 7, line 8].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include an electrical specification in order to provide a detailed layout of the design.

Regarding claim 27, Dolin-Dunstan further discloses wherein the at least one of a mechanical and electrical specification is at least one of a mechanical and electrical schematic diagram [Dunstan, figure 4 and column 1, lines 53-33 and column 4, line 60 – column 7, line 8].

Regarding claims 53 and 92, Dolin-Dunstan further discloses wherein the additional information tool is at least one of a mechanical and a electrical specification [Dunstan, figure 4 and column 1, lines 53-33 and column 4, line 60 – column 7, line 8].

9. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dolin as applied to claim 35 above, and further in view of Wilson et al., (US Publication No. 2004/0193413), (hereinafter Wilson).

Regarding claim 36, Dolin does not specifically disclose wherein the step of identifying the relative juxtaposition further includes determining the orientation of the second resource.

However, Wilson discloses determining orientation and location of a device [Wilson, paragraphs 132 and 137].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide orientation and location of a device in order to determine the orientation of an object relative to another object to allow useful information about the available work.

10. Claims 39-40 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolin as applied to claim 1 above, and further in view of Metcalf, (US Publication No. 2002/0131446).

Regarding claim 39, Dolin does not specifically disclose wherein the resources include components in an automated manufacturing facility.

However, Metcalf discloses programmable logic controllers in a manufacturing facility [Metcalf, paragraphs 2, 4 and 22].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include PLCs in a manufacturing facility in order to provide automation.

Regarding claim 40, Dolin-Metcalf further discloses wherein at least a sub-set of the components are programmable logic controllers [Metcalf, paragraphs 2, 4 and 22].

Regarding claim 84, Dolin-Metcalf further discloses wherein the resources include components in an automated manufacturing facility [Metcalf, paragraphs 2, 4 and 22].

11. Claims 54-61, 63 and 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolin, and further in view of Zagnoni et al., (US Patent No. 6,772,043), (hereinafter Zagnoni).

Regarding claims 54 and 63, Dolin discloses specifying that a first resource communicates with a second resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65];

identifying the relative juxtapositions of the first and second resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Dolin does not specifically disclose determining if the relative juxtapositions of the first and second resources are improbable; and

where, the relative juxtapositions of the first and second resources are improbable, performing a secondary function.

However, Zagnoni discloses determining if the position of the second resource is out of position from the first resource [Zagnoni, column 2, lines 30-40] and performing a secondary function [Zagnoni, column 2, lines 30-40].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include determining a distance between two resources in order to evaluate if the resources could perform the functions assigned.

Regarding claim 55, Dolin-Zagnoni further discloses the step of providing a rule set including rules that indicate probable relative resource juxtapositions wherein the step of determining includes determining if the relative juxtapositions of the first and second resources are consistent with the rule set [Zagnoni, column 2, lines 30-40].

Regarding claim 56, Dolin-Zagnoni further discloses wherein the rule set indicates a maximum distance between the second resource and a reference point within the space such that, when the distance between the reference point and the second resource is greater than the maximum distance, the relative juxtapositions of the first and second

resources are inconsistent with the rule set [Zagnoni, column 2, lines 30-40].

Regarding claim 57, Dolin-Zagnoni further discloses wherein the reference point is the location of the first resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 58, Dolin-Zagnoni further discloses wherein the secondary function is to indicate that the specified communication is improbable [Zagnoni, column 2, lines 30-40].

Regarding claim 59, Dolin-Zagnoni further discloses wherein the method is performed in real time as a resource is added to a sub-set of resources to perform the process [Zagnoni, column 2, lines 30-40].

Regarding claim 60, Dolin-Zagnoni further discloses wherein the method is performed in batch after a sub-set of resources has been configured to perform the process [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 61, Dolin-Zagnoni further discloses the steps of correlating logical network addresses with space locations and wherein the step of identifying the relative positions of the first and second resources includes specifying a network address for each of the first and second resources, determining the locations of the first and second resources from the correlated information and using the first and second resource

locations to determine relative positions of the first and second resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65].

Regarding claim 65, Dolin-Zagnoni further discloses providing a rule set including rules that indicate probable relative resource positions [Dolin, column 4, lines 22-41 and column 7, lines 32-65];

correlating logical network addresses with environment locations [Dolin, column 4, lines 22-41 and column 7, lines 32-65];

specifying first and second network addresses for a first and a second resources, respectively [Dolin, column 4, lines 22-41 and column 7, lines 32-65];

specifying that the first resource communicates with the second resource [Dolin, column 4, lines 22-41 and column 7, lines 32-65];

identifying the network addresses of the first and second resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65];

using the network addresses of the first and second resources to determine the relative positions of the first and second resources [Dolin, column 4, lines 22-41 and column 7, lines 32-65];

determining if the first and second resource relative positions are consistent with the rule set [Zagnoni, column 2, lines 30-40]; and

where the relative positions of the first and second resources are inconsistent with the rule set, performing a secondary function [Zagnoni, column 2, lines 30-40].

Regarding claim 66, Dolin-Zagnoni further discloses wherein the rule set indicates a maximum distance between the first and second resources such that, when the distance between the first and second resources is greater than the maximum distance, the relative positions of the first and second resources are inconsistent with the rule set [Zagnoni, column 2, lines 30-40].

Regarding claim 67, Dolin-Zagnoni further discloses wherein the step of performing a secondary function includes indicating an improbable resource configuration [Zagnoni, column 2, lines 30-40].

12. Claims 62 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolin as applied to claims 55 and 63 above, and further in view of Metcalf, (US Publication No. 2002/0131446).

Regarding claims 62 and 64, Dolin-Zagnoni does not specifically disclose wherein the resources include components in an automated manufacturing facility.

However, Metcalf discloses programmable logic controllers in a manufacturing facility [Metcalf, paragraphs 2, 4 and 22].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include PLCs in a manufacturing facility in order to provide automation.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Examiner's Note: Examiner has cited particular paragraphs / columns and line numbers in the reference(s) applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the cited passages as taught by the prior art or relied upon by the examiner.

Should applicant amend the claims of the claimed invention, it is respectfully requested that applicant clearly indicate the portion(s) of applicant's specification that support the amended claim language for ascertaining the metes and bounds of applicant's claimed invention

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM J. GOODCHILD whose telephone number is (571)270-1589. The examiner can normally be reached on Monday - Friday / 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WJG
10/29/2008

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